rice, egg, &c., on a hard wood table, and taking a pencil from his pocket and collecting the eatables together, close to the edge of the gauze cover, he lifted its edge, and with the pencil point inserted, began sharply tapping among the rice débris. The two chicks at once ran over to that place and bent over, watching the tapping, and to our astonishment they began tapping with their little beaks the same way, and before long had begun to feed on their own account, just as the "Babu" had predicted; and after that lesson we had no trouble.

As I happen to be writing, I may mention that our land lizard (3 feet 6 inches to 4 feet 6 inches total length, name unknown to me) has begun calling in the early dawn and dusk at evening. It is silent during the day and night.

From the bearings taken, it can be heard plainly at a mile in forest, and often five or six calling at once in different directions. The native Asamese name is "Gui," which is precisely the sound it makes; by the old spelling it is "Gooee." S. E. Peal.

Sibsagar, Asam, April 4.

The Bagdad Date-mark.

There will be found in Grattan Geary's "Through Asiatic Turkey" all about the date-mark—a mysterious and troublesome excoriation, coming only once, but which lasts a year, leaving an ugly scar the size and outline of the fruit—visitors for any length of time at Bagdad seldom, and residents never, escape. It is also known at Aleppo and other places, but is worst in Bagdad, almost every native being marked. Even nitric acid has been found to have little effect upon it. I lately spent forty-four days, off and on, at Bagdad, and imagined I had escaped; not so, however, as it proved six weeks after my return to India. But the mark yielded forthwith, and before any damage was done, to hyposulphite of soda, which does so much "fixing" for every amateur photographer, and seemed worth trying. The fact may be usefully mentioned in the interest of Mesopotamian explorers who do not want to be date-marked as a memento; but it is to physiologists they must look for an explanation.

Bombay, April 12. A. T. Fraser.

THE ROYAL SOCIETY SELECTED CANDIDATES.

The following are the names and qualifications of the fifteen candidates recommended by the Council of the Royal Society, on Thursday last, for election into the Society.

J. Wolfe Barry,

C.B., Civil Engineer. Vice-President of the Institution of Civil Engineers. Is eminently distinguished in his profession, and has designed and executed many works of national importance, which include the Tower Bridge, opened by H.R.H. the Prince of Wales, 1894; the City Terminus extension of the Charing Cross Railway, the Inner Circle Railway, and the Barry Dock. Has served as a member of the following Royal and Departmental Commissions:—Royal Commission on Irish Public Works, 1887; Highlands and Islands of Scotland Commission, 1890; Commission on the River Ribble, 1891; Thames Navigation Commission, 1894. Member de la Commission Consultative des Travaux de la Campagnie Universelle du Canal Maritime de Suez. Is the author of many papers, mainly in reference to engineering works, which have been published in the *Transactions of the Institution of Civil Engineers* and elsewhere. Is the author of several professional treatises, among which the following are the more important: "The Barry Dock" (British Association Report, 1888): "Railway Appliances," "Railways and Locomotives," published in conjunction with Sir F. Bramwell, Bart.

Alfred Gibbs Bourne,

D.Sc. (Lond.), Professor of Biology in the Presidency College, Madras. Fellow of University College, London. For many years engaged in teaching and in researches upon Comparative Anatomy and Embryology, especially of Invertebrata. Especially known to comparative anatomists for his discoveries in the structure of leeches, and as discoverer of the hydroid phase of Limnocodium, also of two remarkable new genera of Chœtopod worms, described by him as Haplobranchus and Chœtobranchus. Author of the following, as well as several other memoirs:—"On the Structure of the Nephridia of the Medicinal Leech" *Quart. Journ. Micros. Sci.*, 1880); "Contributions to the Anatomy of the Hirudinea" (*ibid.*, 1884); "On the Hydroid Form of Limnocodium" (*Proc. Roy. Soc.*, 1884); "On the Supposed Communication of the Vascular System with the Exterior in Pleurobranchus" (*Quart. Journ. Micros. Sci.*, 1885). Since he has been in India, Prof. Bourne has sent home important researches on Indian Earthworms, on Chœtobranchus (a new naidiform worm), on a new Protozoon of the genus Pelomyxa, with observations on the structure of protoplasm, and some valuable experimental researches on the suicide of Scorpions (*Proc. Roy. Soc.*, 1889).

George Hartley Bryan,

M.A., Fellow of Peterhouse, Cambridge. Lecturer (on Thermodynamics, &c.) on the University list. Fifth Wrangler, 1886; Class I, Division 1, 1887; bracketed with Senior Wrangler, Smith's Prize, 1888, for the Essay "On the Curves on a Rotating Spheroid of Finite Ellipticity" (*Phil. Trans.*, 1889 A). Author of the following papers:—"On the Stability of a Rotating Spheroid of Perfect Fluid" (*Proc. Roy. Soc.*, vol. xlvii.); "On the Stability of Elastic Systems"; "Waves on a Viscous Rotating Cylinder" (*Proc. Camb. Phil. Soc.*, vol. vi.); and several others in *Phil. Mag.*, *Proc. Lond. Math. Soc.*, and *Proc. Camb. Phil. Soc.*, &c. Also joint author, with Mr. Larmor, of the Report on Thermodynamics, published in the British Association Reports, 1891.

John Eliot,

M.A. (Cantab.), Meteorological Reporter to the Government of India. Late Meteorological Reporter to the Government of Bengal. Was Second Wrangler and Smith's Prizeman, 1869. Mr. Eliot, as Meteorological Reporter to the Government of Bengal, and subsequently as Head of the Meteorological Department of India, has made many important additions to the physical data of Indian meteorology, and has done much in their utilisation, and in the improvement of the administration of the department of which he is now the head. Under him have been carried out the publication of Daily Weather Charts for the Bay of Bengal and Calcutta, for Bombay and the Western Coasts of India, and general charts for the whole peninsula. He has also organised the systematic collection of marine observations from ships arriving at the chief Indian ports. His special work, contained in a long series of memoirs, published either in separate form by the Meteorological Department, or in the *Journal of the Asiatic Society of Bengal*, chiefly relates to storms in India and Indian seas, and comprises complete histories and discussions of fifteen cyclones and upwards of one hundred storms that have occurred between 1877 and 1886. The Annual Reports of the Meteorological Department, prepared by him, also contain many valuable and original discussions. He has contributed very largely to establish the Indian Meteorological Department on a thoroughly scientific basis, and to maintaining its high character and recognised practical importance to our great Indian dependency.

Joseph Reynolds Green,

D.Sc. (Cantab.), M.A., B.Sc. (Lond.), F.L.S. Professor of Botany, Pharmaceutical Society of Great Britain. Distinguished for his acquaintance with botany. Attached to science, and has contributed to its progress by discoveries in the region of physiological chemistry, with reference chiefly to plants. His more important contributions are contained in the following papers:—"On the Organs of Secretion in the Hypericaceæ" (*Journ. Linn. Soc.* (*Bot.*), vol. xx., 1883); (with Dr. Sheridan Lea) "Some Notes on the Fibrin-ferment" (*Journ. of Physiol.*, vol. iv., 1883); "On the Edible Bird's Nest of the Java Swift" (*ibid.*, vol. vi., 1885); "On Proteids occurring in Latex" (*Proc. Roy. Soc.*, 1886); "On the Action of Sodium Chloride in dissolving Fibrin" (*Journ. of Physiol.*, vol. viii., 1887); On Certain Points connected with the Coagulation of the Blood" (*ibid.*); "On the Changes in the Proteids of the Seed which accompany Germination" (*Phil. Trans.*, 1887); "On the Germination of the Tuber of the Jerusalem Antichoke" (*Annals of Botany*, vol. i., 1888); "On the Germination of the Seed of the Castor-oil Plant" (*Proc. Roy. Soc.*, 1888); "On the Occurrence of Diastase in Pollen," (Brit. Assoc. Report, 1891); "On the Occurrence of Vegetable Trypsin in the Fruit of *Cucumis utilissimus*" (*Annals of Botany*, vol. vi., 1892); (with Prof. Vines) "On the Reserve Proteid of the Asparagus Root" (*Proc. Roy. Soc.*, 1892); "On the Germination of the Pollen-grain and the Nutrition of the Pollen-tube" (*Phil. Trans.*, 1894); "On Vegetable Ferments" (*Annals of Botany*, vol. vii., 1893); "On the Influence of Light on Diastase" (*ibid.*, vol. viii., 1894).

Ernest Howard Griffiths,

M.A. Private Tutor. Author of the following papers:—"On the Comparison of Platinum Temperatures with the Kew Standard" (Rept. of Committee on Electrical Measurements, Brit. Assoc., 1890); "On the Determination of certain Boiling and Freezing Points" (*Phil. Trans.*, 1891 A); "The Electrical Resistance of Platinum Wire at Absolute Zero" (*Phil. Mag.*, Dec., 1892); "On the Determination of Low Temperatures by Platinum Thermometers" (*Proc. Camb. Phil. Soc.*, vol. viii., Part I.); "On the Increase in Resistance of a Conductor when Transmitting a Current" (*ibid.*, vol. viii., Part I.); "The Mechanical Equivalent of Heat, together with an Investigation into the Changes in the Capacity for Heat of Water" (*Phil. Trans.*, 1893 A); "The Boiling Point of Sulphur, together with a Method of Standardising Platinum Thermometers," jointly with Mr. Callendar (*Phil. Trans.*, 1891 A).

Supplementary Certificate.—Appendix to the communication entitled "The Mechanical Equivalent of Heat" (*Proc. Roy. Soc.*, vol. lv., 1893); "A Method of Joining Glass and Metal Tubes" (*Proc. Phil. Soc. Camb.*, 1893); "The Measurement of Temperature" (*Science Progress*, 1894); "The Influence of Temperature on the Specific Heat of Aniline" (*Phil. Mag.*, 1895); "The Latent Heat of Evaporation of Water" (read Royal Society, January 1895).

Charles Thomas Heycock,

M.A., Lecturer on Natural Science, King's College, Cambridge. Author of "Revision of the Atomic Weight of Rubidium" (Brit. Assoc. Rept., 1882); joint author of:—"Spectrum of Indium" (*Phil. Mag.* [5] I., 1876); "On a Simplified Form of Apparatus for Determining the Density of Ozone" (*Proc. Camb. Phil. Soc.*, v.); "Lowering of the Freezing Point of Tin by the Addition of other Metals" (*Proc. Chem. Soc.*, No. 65, 1889); "Lowering of the Freezing Point of Sodium by the Addition of other Metals" (*Trans. Chem. Soc.*, lv., 1889); "Molecular Weights of Metals when in Solution" *ibid.* (lvii.); "Freezing Point of Triple Alloys of Gold, Cadmium, and Tin" (*ibid.*, lix.); "Lowering of the Freezing Points of Cadmium, Bismuth, and Lead, when alloyed with other Metals" (*ibid.*, lxi.); "Isolation of a Compound of Gold and Cadmium" (*ibid.*); "Freezing Point of Alloys in which Thallium is the Solvent" (*ibid.*, 1894); "Freezing Point of Triple Alloys" (*ibid.*); "Change in the Zero of Mercury Thermometers" (*Proc. Camb. Phil. Soc.*, vii.).

Sydney John Hickson,

D.Sc. (Lond.), M.A. (Cantab.), Hon. M.A. (Oxon.), F.Z.S. Fellow of Downing College, Cambridge. Author of papers published in the *Philosophical Transactions*, "On the Ciliated Groove (Siphonoglyphe) in the Stomodæum of the Alcyonarians" (1883); "On the Sexual Cells and Early Stages in the Development of *Millepora plicata*" (1888). In the *Quart. Journ. Micros. Sci.*, "The Eye of Pecten" (1880); "The Eye of Spondylus" (1882); "The Structure and Relations of Tubipora" (1883); "The Eye and Optic Tract of Insects" (1895). In the *Tijdschr. van het Nederl. Aardrijkskund. Genootsch.*, "Omzwervingen in Noord-Celebes" (1887). In the *Journ. Anthrop. Inst.*, "Notes on the Sengirese" (1886). Author of the work, "A Naturalist in North Celebes."

Henry Capel Lofft Holden,

Major, Royal Artillery. In India from 1877–84, he carried out a number of experiments in telephony and telegraphy for the Indian Government. Since 1885 he has been in charge of the Department for the proofs of Naval and Land Service Ordnance, and Gunpowders, and for experiment work connected therewith, and has invented and constructed many pieces of apparatus connected with the science of artillery, as well as with electrical and scientific research. Amongst those which have been publicly exhibited are his devices in connection with the chronograph, for measuring the velocity of projectiles; an extremely accurate and sensitive hydrometer for measuring the variations of the density of the acids in the electrolyte accumulator cells (exhibited Royal Society, 1887; see also paper before Iron and Steel Inst., 1891); a high-speed chronographic pen for recording minute intervals of time by electromagnetic means; various instruments for making accurate and rapid tests of the pressure and current in direct current circuits, and in alternating current circuits of both high and low frequency (some exhibited Royal Society, 1892); an instrument for rapidly ascertaining the E.M.F. and resistance of a galvanic cell (exhibited Royal Society, 1893); a compact moving coil galvanometer adapted to universal purposes, which was employed by Profs. Dewar and Fleming in their researches on the resistance of metals, and is used in the recording pyrometer of Prof. Roberts-Austen. He was deputed by the Commander-in-Chief to write the electrical sections of the Paris Exhibition of 1889, the Frankfort Exhibition of 1891, and the Chicago Exhibition of 1893, and furnished the Government with most valuable reports.

Frank McClean,

M.A., LL.D. (Glasg.), F.R.A.S., M.I.C.E. Author of "Photographs of the Red End of the Solar Spectrum from D to A" (*Monthly Notices*, vol. xlix.); "Parallel Photographs of the Sun, Iron, and Iridium, from H to near D" (*ibid.*); "Comparative Photographs of High and Low Sun H to A, with Notes on the Method of Photographing the Red End of the Spectrum" (*ibid.*, vol. li.); "Comparative Photographs of Sun and Metal Spectra" (Series 1 and 2, *ibid.*, vol. lii.). Inventor of McClean's Star Spectroscope, an invaluable aid in the study of stellar spectra. Attached to science, and anxious to promote its progress. Founder of the Isaac Newton Scholarship at Cambridge. Donor of a large telescope to the nation, to be used in physical inquiries at the Royal Observatory, Cape of Good Hope.

William MacEwen,

M.D. (Glasg.), Hon. LL.D. (Glasgow). Professor of Surgery, University of Glasgow. A distinguished Surgeon. Author of:—"Observations concerning Transplantations of Bone, &c." (*Proc. Roy. Soc.*, May 1881, and *Comptes rendus* Acad. Sci., Paris, June 1881); "Treatise on Osteotomy" (London, 1880; translated into French, German, Italian, Roumanian, Swedish and Russian); "Osteogenic Factors in the Development and Repair of Bone" (*Annals of Surgery*, 1887); Address on the Surgery of the Brain and Spinal Cord (*Lancet*, and *Brit. Med. Journ.*, 1888); "The Pupil in its Semiological Aspects" (*Internat. Journ. of Med. Sciences*, 1887); "Radical Cure of Hernia" (*Annals of Surgery*, 1886); also numerous articles on special points in Surgery.

Supplementary Certificate.—Author of a treatise on Pyogenic Infective Diseases of the Brain and Spinal Cord (1893); an Atlas of Head Sections, with fifty-three copper plates, fifty-three key plates and descriptive text (1893). Especially distinguished for his work on the Surgery of the Bones and in the Development and Practice of the Surgery of the Brain and Spinal Cord.

Sidney Martin,

M.D., B.S., B.Sc., F.R.C.P. Assistant Physician, University College Hospital, and Hospital for Consumption, Brompton. Distinguished for researches in chemical physiology and pathology; has carried out researches on chemical bacteriology for the Local Government Board, and for the Royal Commission on Tuberculosis. The following are his principal published papers:—"Papain Digestion" (*Journ. of Physiol.*, v.); "Nature of Papain and its action on Vegetable Proteids" (*ibid.*, vi.); "The Proteids of the Seeds of *Abrus precatorius*" (*Proc. Roy. Soc.*, xlii.); "Physiological Action of the Active Principle of *Abrus precatorius*" (*ibid.*, xlvi.); "The Toxic Action of the Albumose from the Seeds of *Abrus precatorius*" (*ibid.*); "Gluten and the Proteids of Flour" (*Brit. Med. Journ.*, 1886); "The Influence of Bile on Digestion" (with Dr. D. Williams—*Proc. Roy. Soc.*, xlv. and xlviii.); "The Chemical Products of the Growth of *Bacillus anthracis* and their Physiological Action" (*ibid.*, xlviii.); "Preliminary Report on the Chemical Products of the Life of *Bacillus anthracis*" (Rept. of the Med. Officer, Local Govt. Board, 1889-90); "Chemical Pathology of Anthrax" (*ibid.*, 1891); "Diphtheritic Paralysis" (*Proc. Roy. Soc.*, 1892); "Gulstonian Lectures on the Chemical Pathology of Diphtheria compared with that of Anthrax, Infective Endocarditis and Tetanus," 1892; "Two Classes of Vegetable Globulins" (*Proc. Physiol. Soc.*); "Pathology of the Proteids of the Body" (*Brit. Med. Journ.*, 1890).

George M. Minchin,

M.A. (Dubl.), Professor of Mathematics in the Royal Indian Engineering College, Cooper's Hill. Author of the following treatises:—"Statics," "Uniplanar Kinematics," and "Hydrostatics." Also of the following papers :—"Astatic Equilibrium of any System of Forces, treated by Quaternions" (*Proc. Lond. Math. Soc.*); "The Absolute Sine Electrometer" (*Nature*, *Electrical Review*, &c.); "Researches in Photo-electricity" (*Proc. Phys. Soc.* and *Phil. Mag.*); "Impulsion Cells" (*Electrician*, *Proc. Phys. Soc.*); "Seleno-Aluminium Cells and the Electromotive Forces of Starlight" (*Astronomy and Astro-Physics*); "The Magnetic Field of a Circular Current"; "The Magnetic Field close to the Surface of a Wire carrying a Current" (*Phil. Mag.*, *Proc. Phys. Soc.*).

WILLIAM HENRY POWER,

Assistant Medical Officer, H.M. Local Government Board. Author of Reports to the Local Government Board relating to the natural history of epidemic diseases and materially extending the knowledge thereof, more especially (*a*) Demonstration in 1882 of the existence of Scarlatinal Disease in Cows, explaining the previously obscure spread of Scarlatina in human communities by means of Cow's Milk; (*b*) Record of Cases (afterwards followed by Dr. Klein) where Diphtheria had been spread by the consumption of Cow's Milk; (*c*) Discovery, in 1881, of the ability of Smallpox to extend atmospherically (without other personal relation) from a hospital to houses in its neighbourhood. The subject was investigated by a Royal Commission which recognised the facts; they have been subjected to further demonstration by Mr. Power during subsequent years.

THOMAS PURDIE,

B.Sc., Ph.D., A.R.S.M., Professor of Chemistry in the University of St. Andrews. Author of the following :—"On the Synthesis of α Isoheptane"; and "On the Action of Sodium Alcoholates on Fumaric Ethers" (*Trans. Chem. Soc.*, 1881); "Action of Sodium Alkyl Oxides on Ethereal Fumarates" (*ibid.*, 1885); "The Action of Metallic Alkylates on Mixtures of Ethereal Salts with Alcohols" (*ibid.*, 1887). Joint author with W. Marshall, B.Sc., of :—"Action of Alcohols on Ethereal Salts in presence of Small Quantities of Sodic Alkylates" (*Trans. Chem. Soc.*, 1888); "The Addition of the Elements of Alcohol to the Ethereal Salts of Unsaturated Acids" (*ibid.*, 1891). Joint author with J. Wallace Walker, M.A., of :—"Resolution of Lactic Acid into its Optically Active Components" (*ibid.*, 1892); "Optically Active Ethoxysuccinic Acid" (*ibid.*, 1893).

APRIL METEORS.

COMPARATIVELY few meteors of the April shower appear to have been seen this year in consequence of the cloudy weather which prevailed. But if the results are scanty they are interesting, for three fine meteors were observed at more than one station, and their real paths in the atmosphere have been computed.

On April 14, 11h. 44m., a bright first mag. meteor was seen by Prof. A. S. Herschel at Slough, and by the writer at Bristol. It moved rapidly in a rather long path, and left a bright streak. The radiant point is indicated at 316° + 31° near ζ Cygni, and the meteor fell from 87 to 71 miles over the English Channel. During its visible career it traversed a course of 107 miles with a velocity of about 49 miles per second. The radiant of this meteor near ζ Cygni is almost identical with that (314° + 27°) found for a 1–2 mag. meteor observed on April 20, 1893, also by Prof. Herschel and the writer.

On April 19, 10h. 59m., a fine meteor, variously estimated as = 1st mag., 2 × ♃, = ♀, = 1st mag., was observed by Mr. Corder at Bridgwater, Mr. Blakeley, Dewsbury, Mr. Packer, Birmingham, and the writer at Bristol, respectively. Its motion was moderately slow, and it left a streak. The direction of its flight shows it to have been a Lyrid with a radiant at 269° + 30°. The meteor descended from 91 to 43 miles over the North Sea and Lincolnshire, and traversed a path of 97 miles with a velocity of 33 miles per second. This object appeared much brighter to the observers at Birmingham and Dewsbury than to those at Bridgwater and Bristol, for the meteor was far more distant from the latter places, and its light much veiled in the mist lying over the stars of Cygnus near the north-east horizon.

On April 19, 11h. 46m., another conspicuous meteor, moving very swiftly, and leaving a bright streak, was seen in Hercules and Boötes by Mr. Corder at Bridgwater, and the writer at Bristol. Its radiant was in Sagitta at 300° + 20°. The meteor fell from 77 to 71 miles over Wiltshire and Somerset, and travelled along a path of 40 miles in less than one second of time. The radiant in Sagitta furnishes a well-defined meteor shower at the April epoch, and I first detected it in 1877. My positions for the radiant are as follow :

D, 92	...	1877, April 16–19	...	298° + 25°	6 meteors
D, 110	...	1885, April 18–20	...	299 + 24	5 ,,
D, 121	...	1887, April 19–25	...	302 + 23	4 ,,

The mean position is at 300° + 24°. Mr. Corder saw a shower in April–May 1876–9 from 300° + 20° (7 meteors), which presents an excellent accordance. The meteors of this stream are very swift, and commonly germinate streaks; but the shower is not well displayed until the morning hours, the radiant being very low before midnight.

W. F. DENNING.

NOTES.

THE following fifteen candidates were selected on Thursday last by the Council of the Royal Society, to be recommended for election into the Society:—Mr. J. Wolfe Barry, Prof. A. G. Bourne, Mr. G. H. Bryan, Mr. J. Eliot, Prof. J. R. Green, Mr. E. H. Griffiths, Mr. C. T. Heycock, Prof. S. J. Hickson, Major H. C. L. Holden, Mr. F. McClean, Prof. W. MacEwen, Dr. S. Martin, Prof. G. M. Minchin, Mr. W. H. Power, Prof. T. Purdie. We give the qualifications of the candidates in another part of this number.

THE memorial of the late Prof. J. C. Adams, at Westminster Abbey, will be unveiled this afternoon by the Duke of Devonshire.

WE are glad to be able to report that Prof. Huxley has been steadily improving in health during the past few days.

DR. P. DANGEARD has been appointed Professor of Botany to the Faculty of Sciences at Poitiers.

AT a meeting of the Court of the Spectacle Makers' Company, on Thursday last, Mr. W. H. M. Christie, the Astronomer Royal, was presented with the honorary freedom of the Company, in recognition of his services to astronomical science.

THE De Candolle prizes have been awarded by the Physical and Natural History Society of Geneva to Dr. O. Warburg for his monograph of the *Myristicaceæ*, and to Dr. R. von Wettstein for his monograph of the genus *Euphrasia*.

DURING the past week, the deaths of several eminent men of science have occurred. Surgeon-Major Carter, who was elected a Fellow of the Royal Society in 1859, and obtained the Royal Medal in 1872, died on Saturday last, the 4th inst., at his residence in Budleigh Salterton. We notice also the death of Mr. A. E. Durham, late Vice-President of the Royal College of Surgeons of England, and the author of numerous works on subjects connected with medicine and surgery. Among the announcements of deaths abroad, we regret to see the name of Prof. K. Ludwig, Professor of Physiology in the University of Leipzig, and Director of the Physiological Institute there. He was seventy-eight years of age. The death is also announced of Prof. Manuel Pinheiro Chagas, General Secretary of the Royal Academy of Sciences at Lisbon. Prof. Chagas was born November 13, 1842.